

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-020873**Date Inspected:** 22-Feb-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

CWI Inspector: Mr. Bao Qian

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG Bay 14

ZPMC issued "Inspection Notification Sheet" number 08365 item #1 informing Caltrans QA that ZPMC is requesting ultrasonic inspections (UT) of OBG segment 13AE complete joint penetration welds SEG3007AB-032, 034, 038, 047, 087 and 088. This QA Inspector performed random visual and ultrasonic inspections of approximately 15% length of areas previously tested by ZPMC personnel and items observed by this QA Inspector appear to comply with AWS D1.5 UT requirements. For additional information on these inspections see this QA Inspector's TL6027 Ultrasonic Test Report.

This QA Inspector observed ZPMC welder Mr. Li Yong Shui, stencil 067656 used shielded metal arc welding procedure WPS-345-SMAW-1G(1F)-FCM-Repair-1 to make weld repair of ultrasonic rejections to OBG segment 14E weld SEG3019E-2-146. ZPMC QC informed this QA Inspector that weld repair document B-WR-20273 documents this weld repair. This QA Inspector measured a welding current of approximately 180 amps and Mr. Li Yong Shui appeared to be certified to make this weld. Items observed on this date appeared to generally

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## WELDING INSPECTION REPORT

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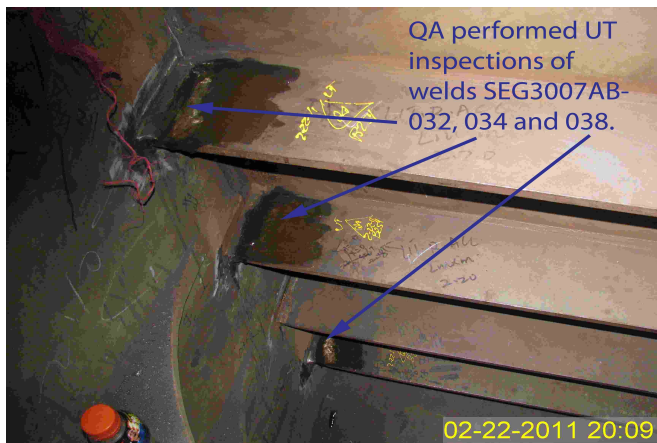
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comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Niu DuoJun, stencil 037932 used shielded metal arc welding procedure WPS-B-P-2214-FCM-1 to make OBG segment 14E weld SEG3019BC-014. This QA Inspector measured a welding current of approximately 170 amps and Mr. Niu DuoJun appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Luo Xuanping, stencil 067610 used shielded metal arc welding procedure WPS-B-P-2114-FCM-1 to make OBG segment 14E weld SEG3019BC-020. This QA Inspector observed a welding current of approximately 180 amps. This QA Inspector observed Mr. Luo Xuanping appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Yang Gencheng, stencil 066418 used shielded metal arc welding procedure WPS-345-SMAW-3G(3F)-FCM-Repair-1 to make weld repair of ultrasonic rejections to OBG segment 14E weld SEG3019BB-019. ZPMC QC informed this QA Inspector that weld repair document B-WR-20270 documents this weld repair. This QA Inspector measured a welding current of approximately 175 amps and Mr. Yang Gencheng appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.



### Summary of Conversations:

See Above.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey +8615000026784, who represents the Office of Structural Materials for your project.

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**Inspected By:** Dawson,Paul

Quality Assurance Inspector

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**Reviewed By:** Riley, Ken

QA Reviewer